Message

Nickle, Richard (ATSDR/DTHHS/OD) [ran2@cdc.gov] From:

11/13/2017 8:51:32 PM Sent:

Helverson, Robert [/o=ExchangeLabs/ou=Exchange Administrative Group To:

(FYDIBOHF23SPDLT)/cn=Recipients/cn=e96005a319744540a11a1aed352395d1-Rhelvers]

CC: Edge, Charles (ATSDR/DTHHS/OD) [ibd7@cdc.gov]; Markiewicz, Karl (ATSDR/DCHI/EB) [kvm4@cdc.gov]; Helverson,

> Robert (ATSDR/DCHI/EB) [gfu6@cdc.gov]; Holler, James S. (Jim) (ATSDR/DTHHS/OD) [jsh2@cdc.gov]; Cseh, Larry (ATSDR/DTHHS/OD) [loc3@cdc.gov]; Werner, Lora [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=921f9f156035403fa605c142a287cc1a-Lwerne02]

RE: Parkersburg, WV Air Sample Data Review Subject:

Bob, I have questions about the drums. I am not sure the drums are reflected in the inventory that WV sent last week. The drums may be part of the earlier hand written inventory the state provided from their interview with the warehouse operator over that first weekend. However, I don't think we know what was in the drums. A lot of the ones I saw in the background photos and the ones on Google Earth seemed to be the blue polymer drums; that would imply acids or caustics, but does not eliminate other compounds.

Re: the pesticides - Based on the size and intensity of the fire, the folks who operated these warehouses seem to fit into that historical group of operators who are not on the cutting edge of chemical safety practices but can really stuff a warehouse. I would not want to rely very heavily on any assumption of normal operational patterns for a plastics warehouse. Having said that, the inventory of what was in the building seems to match the company's product list on their website pretty well. While the former operator Ames operated for what sounds like decades at this location, I am not aware that Ames as a company ever produced pesticides. I think of them as making shovels, picks, hoes, and other similar implements with plastic or polymer handles. To the extent this is true, pesticides would not seem to fit into the business model for these companies that we know operated at this location. Assuming all the pesticides are coming from the same source, the presence of the historic use pesticides in an outfall coming primarily from the industrial park leads me to think the operations in the burned warehouses are not the direct source of the pesticides {though the buildings may have been treated with these substances when built. There appear to be other operations in the industrial park between the warehouse that burned and the Little Kanawha river where the sampled outfall was presumably located. There may have been other companies that operated in the warehouses that burned. However, I would think anyone who works with chemicals would probably not be comfortable with drums of "banned" pesticides rusting away on their loading docks either, I would be surprised if they did not dispose of the drums as quickly as possible. I'm guessing this area has flooded upon occasion in the nearly 40 years or so since these pesticides went off the US market. Floods affecting the Little Kanawha should have flushed out these drainpipes and the outfall pretty well. It seems like it would be worthwhile for EPA or the state to look at those operations current and past – in the area serviced by the drain at least since the last flood to see if there may be a source for the pesticides in that pipe.

I agree spatial distribution of the samples relative to the plume is a possible concern. The timing of the samples may not reflect what the emissions were the first week. The presence or absence of TICs or PAHs in the data is another challenge. I think all we can do is lay out what we don't know (and likely never will now that the fire is out) and then talk about the sample results. We may be able to use some of the PM data to assess how close the location of the sampler was to the plume assuming we can match the data points.

From: Helverson, Robert (CDC epa.gov)

Sent: Monday, November 13, 2017 11:33 AM

To: Nickle, Richard (ATSDR/DTHHS/OD) <ran2@cdc.gov>; Werner, Lora S. (CDC epa.gov) <werner.lora@epa.gov> Cc: Edge, Charles (ATSDR/DTHHS/OD) <ibd7@cdc.gov>; Markiewicz, Karl (ATSDR/DCHI/EB) <kvm4@cdc.gov>;

Helverson, Robert (ATSDR/DCHI/EB) <gfu6@cdc.gov>; Holler, James S. (Jim) (ATSDR/DTHHS/OD)

<jsh2@cdc.gov>; Cseh, Larry (ATSDR/DTHHS/OD) <loc3@cdc.gov>

Subject: RE: Parkersburg, WV Air Sample Data Review

I, too, agree that we should wait until the entire data set is verified, QC'ed and shared with us for a final comprehensive review instead of piecemeal reviews.

Regarding the pesticides, I agree Rich - it could be that the runoff created a deep swale that dredged up old pesticide treated soils...or, it could be leaking drums from the warehouse (have you seen the drums lined up along the back walls of that building before the fire!) that were not consumed in the fire, or neither (we have not been given a specific sampling location that I know of). The EPA folks that Karl and I spoke with a few weeks ago noted that there were a wide range of pesticides in the data set, some of which are currently used and others which are historic, so that doesn't tell us much. EPA also said they aren't planning on any specific enforcement actions related to the pesticide data alone at this point. This week, the EPA EPCRA enforcement folks are planning on conducting inspections of this company's warehouses, but I am not sure they are visiting the fire site.

Regarding the summa and all other data, I think the biggest limitation is spatial – very limited monitoring locations and no correlation (shared with the data) regarding downwind or in the primary 'fallout' areas for the particulate and vapors. We can't say we've received and reviewed data for the hotspots or otherwise, so we can't say where the data we've reviewed falls within the overall set of environmental conditions during the fire. Certainly we also had limited times for air monitoring and, specifically, limited times for sampling of organics and otherwise.

Robert H. Helverson, MS
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From: Nickle, Richard (ATSDR/DTHHS/OD) [mailto:ran2@cdc.gov]

Sent: Friday, November 10, 2017 8:09 AM **To:** Werner, Lora < Werner, Lora@epa.gov>

Cc: Edge, Charles (ATSDR/DTHHS/OD) <ibd7@cdc.gov>; Markiewicz, Karl (ATSDR/DCHI/EB) <kvm4@cdc.gov>;

Helverson, Robert (ATSDR/DCHI/EB) <gfu6@cdc.gov>; Holler, James S. (Jim) (ATSDR/DTHHS/OD)

<jsh2@cdc.gov>; Cseh, Larry (ATSDR/DTHHS/OD) <loc3@cdc.gov>

Subject: Re: Parkersburg, WV Air Sample Data Review

To answer your questions from my perspective:

The pesticides in the outfall should not be there; to that extent, their presence should be explained. They were putting 6M gallons per day on the fire at one point, according to the mayor in one of his interviews. The explanation may be washing out soils that were treated in the 60's or 70's. if it doesn't affect water supplies, it may not be a big deal. Something to watch, but probably not a driver yet.

On the sampling locations, it depends on the reason for the sample. If it is for evaluating ambient air quality, higher is better to get away from transient sources. If it is for evaluating exposures, lower is better because that is where people are. If you go low, you need to ID and account for those transient sources.

In a perfect world, the sample should be from the point where the plume from the fire comes back to earth. That may be 20 miles down range and 5 miles in breadth. May be hard to connect the pollution to the source then. If the samples are in the smoke at least some of the time, that is about the best that can be done.

Yes, time lapse is a better analogy. Yes, canisters or most samples are point source. Canisters can be set for grab samples (one big slurp of air) or continuous samples (tiny sips over a period of time). EPA's samples were sips, not slurps. OH's samples may have been slurps, not sips. I don't remember what CTEH sample was. Open path sampling like ASPECT's FTIR or moving sampling like the TAGA are about the only forms of sampling that is not a point source, so far as I know.

Rich Nickle
ATSDR Emergency Response
Sent from my iPhone

On Nov 9, 2017, at 5:17 PM, Werner, Lora S. (CDC epa.gov) <werner.iora@epa.gov> wrote:

Ok thanks Rich! I am good with waiting for the next data sets if that fits the needs of our partner agencies. I know we will be a lot further along on that now that we have this great framework started.

I will check in with EPA and get their thoughts, if this is agreeable to them I can then run this plan by OH/WV and local health. Might be good to have another joint call next week and describe where we are.

On the other issues you raise:

Definitely your guys call on how much or little to refer to the Deepwater chlorobenze level. I think it would be good to clarify either way if one of the highest hits of that chemical was at EPA's selected background location.

I wasn't at the mtg Karl and Bob had with EPA pesticides person - did either of you get the impression they would be taking any next steps or weighing in further? Or is all of that kind of in EPCRA's and state's hands now? (I am fine with not mentioning that outfall sample info in our email if that is not appropriate I just want to understand if there is a hanging issue here).

I understand what you are saying about my use of the word "snapshot" - would "window" work better maybe? They are more like a time lapse photo than a panoramic if we want to keep on that theme? I don't think summas pull a lot of ambient air in so they represent what was at that spot over the sampling duration right? I know the OSC was concerned the fact that these cans were at ground level that it seemed to her they might miss some of the plumes.

Thanks L

Sent from my iPhone

On Nov 9, 2017, at 4:42 PM, Nickle, Richard (ATSDR/DTHHS/OD) < ran2@cdc.gov> wrote:

Well couple of things. Charles, you decide which way to go.

I would like to not mention the actual value for chlorobenzene from the Deepwater Horizon. It has been ~7 years now; there may be new data out there. What data was around 7 years ago may have changed. I mentioned it to track the thought processes more or less. I think we just want to highlight the study value. I did a quick check and that study value should be pretty close to the lowest LOAEL.

I don't think we want to mention the pesticide in the surface water outfall until the pesticide folks get a chance to weigh in on that. We don't want to forget about that, but we may see the ORSANCO data from rivers soon. It sounds like we have enough limitations just taking that sentence out for an anchor to windward.

These samples were 12-14 hour averages and more or less open path to the fire scene. We probably need to get away from calling them snapshots. If we want to use a photographic analogy, these would be a panoramic shot - like the pictures of the band or the senior class together on the bleachers in the high school yearbook? [if they still do those]. The "pan" for these samples is over the 12 hours it took to collect the sample.

I'm OK with taking out the community concern section in its entirety. If we leave it in, let's not talk about things that we already referred to someone else.

I still haven't gotten with Bill on what he wants us to do to improve the review process; all I'm confident about is that it will involve more review. No one's life in Parkersburg or SE Ohio is being disrupted right now; they are all sleeping safely in their homes every night. There is nothing really compelling in this data to change any of that. We may have the water data, the ash data, and/or the round 2 air sampling results early next week. Maybe the smart thing is to table this until the rest of the data comes in and just do one email - if that works for EPA and the two states. Any dissenting votes amongst us?

Rich Nickle ATSDR Emergency Response

From: Werner, Lora S. (CDC epa.gov)

Sent: Thursday, November 09, 2017 3:34 PM

To: Nickle, Richard (ATSDR/DTHHS/OD) < ran2@cdc.gov>; Edge, Charles

(ATSDR/DTHHS/OD) < ibd7@cdc.gov>; Markiewicz, Karl (ATSDR/DCHI/EB) < kvm4@cdc.gov>; Helverson, Robert

(ATSDR/DCHI/EB) <gfu6@cdc.gov>

Cc: Holler, James S. (Jim) (ATSDR/DTHHS/OD) < ish2@cdc.gov>; Cseh,

Larry (ATSDR/DTHHS/OD) < loc3@cdc.gov>

Subject: RE: Parkersburg, WV Air Sample Data Review

Ok, here are my comments for your consideration. Glad to discuss. I am free now or tomorrow (I know that is the holiday), or could make whatever work on Monday. Thank you for working this up! Lora

Lora Siegmann Werner, MPH
Regional Director, Region 3
Division of Community Health Investigations
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Please note: emails may appear as <a>@epa.gov because we share IT services in our regional office

From: Nickle, Richard (ATSDR/DTHHS/OD) [mailto:ran2@cdc.gov]

Sent: Thursday, November 09, 2017 2:08 PM

To: Edge, Charles (ATSDR/DTHHS/OD) < <u>ibd7@cdc.gov</u>>; Markiewicz, Karl (ATSDR/DCHI/EB) < kvm4@cdc.gov>; Werner, Lora S.

(ATSDR/DCHI/EB) < ikw9@cdc.gov>; Helverson, Robert (ATSDR/DCHI/EB)

<gfu6@cdc.gov>

Cc: Holler, James S. (Jim) (ATSDR/DTHHS/OD) < jsh2@cdc.gov>; Cseh,

Larry (ATSDR/DTHHS/OD) < loc3@cdc.gov>

Subject: RE: Parkersburg, WV Air Sample Data Review

Here are my comments. I thought you did a good job; I made some edits and suggested some alternative language. I'm not sure where the farm animals and open water issues came from; I'm not sure the advice is appropriate.

I'm reasonably comfortable saying that something that doesn't hurt a 16 kg child probably won't bother a 400 kg dairy cow or a 10 kg dog. I'm not so sure about a 3 kg chicken or a 1 kg tilapia. I would rather we refer farm animal issues to the State Vet; it would be probably good to refer pet issues to the vet as well. The Animal Poison Control Center is also available for a nominal fee, but I don't know what their current rates are.

Why we would want to retain the water in open containers exposed to the smoke from the fire? Shouldn't we talk about dumping the water and wash the container before replacing it? Are we talking about farm ponds or swimming pools?

After we get the region's thoughts, lets talk about it a bit more.

From: Edge, Charles (ATSDR/DTHHS/OD)

Sent: Thursday, November 09, 2017 12:48 PM

To: Nickle, Richard (ATSDR/DTHHS/OD) < ran2@cdc.gov">; Markiewicz, Karl (ATSDR/DCHI/EB) < kvm4@cdc.gov; Werner, Lora S. (ATSDR/DCHI/EB) < kw9@cdc.gov; Helverson, Robert (ATSDR/DCHI/EB) < gfu6@cdc.gov>

Cc: Holler, James S. (Jim) (ATSDR/DTHHS/OD) < ish2@cdc.gov>;

Cseh, Larry (ATSDR/DTHHS/OD) < loc3@cdc.gov>
Subject: Parkersburg, WV Air Sample Data Review

Hello all,

Please find attached the draft of the air sampling data review. Please provide your comments at your earliest convenience and I will update and put into clearance.

Thank you Charles

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